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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/402,721	12/28/1999	DIETER PELZ	202531	6319

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EXAMINER

HENDRICKS, KEITH D

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/402,721

Applicant(s)

PELZ ET AL.

Examiner

Keith Hendricks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-18,20-22,24-33 and 36-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1,3-5,7-18,20-22,24-33 and 36-42 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>(4 sheets)</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The Examiner assigned to this application has changed.

The finality of the rejection of the last Office action is hereby withdrawn. Any inconvenience to applicant is regretted. A restriction requirement is provided below. In order to advance the prosecution of the application, applicant's attention is further directed to the Examiner's notes following the restriction.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- Group I, claims 1, 3, 4-5, 7-18, 20-22 and 24-28, 30-33, 36 and 37-42, drawn to a method of producing beer comprising filtering beer through a porous membrane and cleaning the membrane with an amylase and/or cellulase enzyme (claims 1 & 3), or with a cellulase with the recited properties (claims 4-5, 7-18, 20-22 and 24-28).
- Group II, claim 29 drawn to a method for producing beer comprising filtering beer through a porous membrane, monitoring the streaming potential or zeta potential for membrane clogging, then stopping the filtration and cleaning the membrane.

Note: Although claim 36 depends from claim 29 (Group II), it is listed in Group I because the step of cleaning the membrane with the recited cellulase relates to the special technical feature of Group I. Before becoming allowable, claim 36 should be amended to be either in independent form, or to be dependent upon an independent claim of Group I.

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The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the invention listed as Group II comprises steps for monitoring membrane clogging via the streaming potential or zeta potential, and comprises a general cleaning step. This differs significantly from the invention listed as Group I, which does not require a monitoring step, does not specifically involve the streaming potential or zeta potential, and which does specifically utilize either an amylase and/or a cellulase enzyme to clean the membrane. In Group I, the special technical feature of cleaning the membrane with either a cellulase or an amylase is not shared with Group II.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i). type

Examiner's Notes

- Claims 1 and 3 are currently allowable, in light of applicant's arguments. Applicant has demonstrated superior results utilizing an amylase and/or cellulase to clean the porous membrane used to filter beer within the recited methods, over those of the prior art utilizing multiple enzymes in combination. These prior art mixtures do not teach or suggest the instantly-claimed invention, and do not teach or suggest the advantages of utilizing a cellulase and/or amylase without other enzymes present.
- Claims 4-5, 7-18, 20-22 and 24-28, 30-33 and 37-42 would be allowable if amended to recite the cellulase in a closed group (i.e. "an enzyme consisting of..."), similar to the language of claim 1. This would make the claim allowable for the same reasons cited immediately above, with respect to claims 1 and 3. However currently, WO 96/23579 (of record) at the least would apply to the claims, where a mixture comprising cellulase and other enzymes is utilized to clean filter membranes in beer processing. The claim recites an inherent activity of a type of cellulase, yet

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this is not specific to a single cellulase, and in fact, encompasses any number of cellulases from numerous sources, many of which were commercially known and commonly utilized in industry. While applicant may have found a preferred activity for cellulases within the claimed invention, this does not render such cellulases different or patentable over those known in the art, including known processes already utilizing such enzymes.

- Claim 36 would be allowable if amended to be part of Group I, as stated above, AND if amended to recite the cellulase in a closed group (i.e. "an enzyme consisting of ..."), similar to the language of claim 1. To avoid a duplicate claim issue, applicant is encouraged to maintain a distinction between a potentially re-written claim 36, and claim 4.
- The rejection under 35 USC 112, 2nd paragraph, regarding the term "about", is hereby withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Hendricks whose telephone number is (571) 272-1401. The examiner can normally be reached on M-F (8:30am-6pm); First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KEITH HENDRICKS
PRIMARY EXAMINER